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NOW IS THE TIME TO: RETHINK, REDESIGN, AND REDEPLOY NAVAL AVIATION

by

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Naval commanders have always prided themselves on the Service's ability to opetate outside the constraints of politics ashore while still remaining readily available nearby at sea to intetcede as necessary. Partly fot this reason, naval aviation and the Matines have played prominent roles in most crises since the end of World War II.

However, unless out forces become dramatically stronger than they are now, we cannot continue to musrer local superiority in such areas as the Arabian Sea on a sustained basis while still maintaining catrier presence elsewhete. Any attempt to do so will aggravate personnel and maintenance problems long present within the naval air forces, and could deal a final death blow to near-term readiness. Clearly, if we are to go on deploying in the ways to which we have become accustomed, we must have more ships. Still, a goal of 600 ships now appeats on its way to becoming the victim of any one of several factors:

- Major defense cuts required to balance the federal budget or to make way for revived social programs.
- Failure to meet retention and enlistment goals in the long term.
- Inability of the industrial base in the near term to increase ship construction significantly.

Therefore, in planning naval aviation's future, we should establish certain criteria which, in the face of uncertainty, will provide a force capable of supporting out national strategy. These are:

- To maintain our flexibility while confronting strategic and economic uncertainty.
- To integrate and correlate out existing forces where possible to stretch their operating capability.
- To be prepared to continue with a fleet of fewer than 600 ships.

If the budget axe falls then we will still want to maintain the offensive capability inherent in our carrier battle groups. The geographic range of the Navy's responsibilities is too broad, and its forces too small, to adopt a defensive posture in a global conflict. The war must be taken to the enemy, with the objective of destroying his naval forces so we can retain out freedom of action. Pethaps, then, a new way to deploying our carriers should be considered, one which permits us to concentrate superior power at the point of confrontation so that the battle can be fought on our terms.

A New Carrier Deployment Policy.

The traditional way to provide combat capability in support of a U.S.

military strategy of forward defense has been to keep as much of the fleet forward as possible. The question must be asked, "are such fotward deployments still credible?" A more efficient program for deploying our carrier forces would seem to be the first order of business. The objective should be to decrease our strategic uncertainty and increase thar of our foes by increasing our flexibility and readiness. This is particularly important in a global conflict when the boundaries between the Atlantic and Pacific fleers' areas of responsibility will begin to blur, requiring the fleets to support each othet on a more regular basis. Even in a regional crisis such mutual support is necessary in order ro prevent an inequitable workload from falling upon one fleet or the other. Such assistance was rendered during the Korean and Vietnam wars and continues to this day.

However, after a generation and more of straining our carriers and their men to do everything anyone thought to demand of them, carrier deployments should be planned to accommodate only the most important U.S. interests. Now consideration must be given to the needs of our personnel, the demands of maintenance, and an equal workload.

The way to do this is to deploy only two carriers at one time. One, the on-station ready carrier, would be in the area of immediate concern to U.S. interests (likely to be Southwest Asia for the foreseeable future). The other, the standby carrier, would be in the Atlantic, the Mediterranean, or the Pacific, ready to respond to other potential crises or to reinforce the on-station ready carrier. Neither would be scheduled to be away from home port more than six months, and the standby carrier would relieve the ready carrier on-station after three months. The rest of the carrier force not in overhaul or service life extension would be held in home waters, ready to deploy either in succession or *en masse* as the situation warrants.

This change in deployment habit and custom will inctease out readiness to go where formerly we seldom went. And thar is becoming more and more important as the potential for trouble increases in Africa, the Caribbean, and Central America. A plan for responsive carrier deploymenrs will also more readily support a sequential naval srrategy, one where we have to pick and choose between many commitments. This is an exigency we probably will have to contend with for a long time.

Any plan which would withdraw continuous carrier presence from watets where U.S. naval air has customarily operated is certain to provoke debate. However, our familiar deployment habits have tended to leave much of the fleet vulnerable to destruction by Soviet long-range air. Futthermore, a fleet spread as thin as ours normally cannot be prepared as well as it ought to be fot either a war or a crisis. If the Soviets were to attack either NATO or someplace else it would be more discomforting to them to speculate on how to handle carriers deploying in force[1] than to contend with a few small and geographically fixed battle groups.

Releasing the forces from fixed deployment schedules would also ease the expensive demand on the logistic support ships, which even in non-war must strain to meet the demands we place upon them. In order to maintain some enduring presence overseas, our forward deployed forces—currently centering on the carrier battle group—could be replaced by smaller battle groups consisring of surface ships and attack submarines armed with cruise missiles. The carriers would be deployed in force only to trouble spots, they would sail only as required, remain only as long as required, and be relieved by lesser forces for an enduring presence as soon as possible.

The concept of responsive carrier deployments has a significant offensive connotation—for it opens up to us the ability to respond with maximum force to strengthen any of our smaller battle groups thar might be threatened. The concept not only recognizes a situation that is being forced upon us by events, but it also acknowledges our inability to maintain a continuous presence in three oceans at a time. The difference between 12 and 15 carriers would probably still be marginal in terms of accommodating the threat and a fixed deployment schedule in rhree oceans when one views an ever-expanding list of commitmenrs for carrier forces well into the next century.

While overseas homeporting of additional carriers might be reconsidered, this move is fraught with possible problems. Events are changing too rapidly, even within countries allied to us, to foresee the consequences of such a move. Facilities established to support overseas homeporting of an additional carrier could be totally lost if we found ourselves forced out of the host country.

A Policy to Integrate and Correlate Our Forces.

Captain Jeremy D. Taylor's proposal[2] to assign the majority of the Marine Corps' tactical aviation to carrier air wings deserves serious consideration. Captain Taylor would assign the Marines to the three additional ships planned to achieve a force of 15 deployable carriers in the desired 600-ship fleet. The following force design expands on Caprain Taylor's article. Further, it envisions that funds needed to pay for Navy aircraft and Navy aircrews for the additional carriers would instead become available for another proposal, to be examined shortly.

The force design envisions three amphibious strike forces, each built around a strike carrier. Suitable strike aircraft drawn from Marine air wings would be assigned to the strike carrier and the other aviation-capable ships. Conventional aircraft would operate from the strike carriers, while VSTOL and helicopters would operate from the LHAs, LPHs, and LPDs. Most air operations would be conducted from strike force ships, excepr when the situation allows for temporary shore basing. This concept resurrects the sea-basing concept and expands it to include a strike carrier. An enlarged sea-basing design is necessary since the full spectrum of Marine air cannot be deployed until secure airfields are available in or near the amphibious objective area. Presently, such deployment relies on an existing airfield or on building one, assuming the terrain allows for such consrruction. Therefore, although Marine air is tactically superior in terms of flexibility and diversity of aircrafr, there is, in actuality, little conceptual difference between rhe way the Marines and the Air Force's Tactical Air Command plan to deploy their air assets into a theater.[3] Hence, USMC tactical air lacks the unique quality of the forward deployed Marine ground and helicoprer forces during the crucial employment phase of an operation when the landing force must primarily depend on Navy tactical air for support. The fragmentation of the USMC assault system during this crucial phase brings into serious question the integrity of the Marine air-ground task force. Expanded sea-basing of Marine tactical air would also provide for an increase in readily available air-delivered firepower, particularly if there is a delay in delivering ashore conventional fire support means such as tanks and artillery.

The *Midway* is a likely candidate to be one of the strike force carriers, since she is already homeported overseas near the First Marine Air Wing. As Captain Taylor points out, two other likely candidates are the currently idle *Oriskany* and *Bon Homme Richard.*

One of rhe battleships planned for reactivation would also be assigned ro

each amphibious strike force for gunfire support. The cruise missiles planned for the BBs would primarily be the antiship version—a capability that would increase protection of the force during stand-off and all-weather operations against enemy ships. Conventional take-off and landing and VSTOL aircraft would operate from the force's carrier, while the helicopters would be dispersed throughout the other aviation-capable ships, such as the LHAs and LPHs.

Conceptual Amphibious Strike Force 1985-1990

Type Ship	No. of Ships	Troops	No. Aircraft Helos	CTOL/VSTOL
CVL	1	—	—	60
LPH	2	3600	24	—
LHA	2	3800	38	—
LPD	5	4600	—	—
LSD	1	400	—	—
LST	6	2280	—	—
BB	1	—	—	—
Total	18	14,680	62	60*

*Approximately equal to the Tacair supporting a Marine Amphibious Brigade.

A program to make the LPDs totally VSTOL-capable should be considered as another way of increasing aircraft dispersal at sea in order to decrease force vulnerability. The little-known success of such ships as bases for coastal interdiction aircraft during the Vietnam war attests to the potential of using this highly underrated ship in an offensive air support role.[4] The redesign of the requested LHD-X amphibious assault ship so she can handle VSTOL aircraft, a proposal made last summer by Senator Gary Hart (D-Colo.),[5] would provide still another way of dispersing aviation within the amphibious task force. The force could be provided some ASW and antiship surveillance and targeting capability through the use of the carriers or converted LPDs as host ships for helicopters designed for these missions.

The next step would be to assign the ready amphibious strike force to the Rapid Deployment Force. This infusion of extra mobility and offensive firepower consisting of an old but rejuvenated attack aircraft carrier, some smaller deck carriers, and some ships armed both with cruise missiles and heavy guns, would greatly enhance the value of the Rapid Deployment Force. Just as in the proposal for a new carrier development policy, the amphibious strike forces would also be held in home waters, to be used only when and where the situation warrants.

Additional troops and equipment not aboard strike force shipping could be transported by Military Sealift Command shipping or airlifted to an embarkation point near the amphibious objective area, loaded aboard the empty amphibious ships, and then delivered to the landing zone. If required, the remainder of Marine aircraft would fly directly from their home bases to the objective area once suitable airfields for them have been secured.

This arrangement would be a vast improvement on the way we deploy Marines presently, for it would be imprudent indeed to commit the small units forward deployed during a major war without undue risk to all of them.

An Alternative to the 600-Ship Navy.

The development of a long-range naval aviation strike force may be an alternative to building a significant number of ships if the latter proves to be prohibitively expensive in terms of time and cost.[6] Such a force lends itself to be manned to a significant degree by reserve personnel and could exemplify the success of the U.S. Naval Reserve P-3[7] squadrons and the Air National Guard. When faced with mobilization, the reserves in this force would more likely be operationally ready to augment the regular Navy than, for example, those in a squadron of frigates. Tactically it would seem, for example, that the Battle of the North Atlantic could be

fought well with an aircraft designed for:

- Strikes against the foe's naval infrastructure, using cruise missiles.
- Attracks on the enemy's surface ships.
- Laying mines in waters which otherwise we couldn't reach.

A force with such an aircraft would not be a separate strategic air command encroaching upon Air Force responsibilities, for the long-range naval aviation strike force would be engaged solely in the naval mission of sea control and sea denial. During World War II, the Navy flew its own bombers for control of waters within range of land bases and it is time again to investigate seriously the feasibility of this approach. The 1958 DOD Reorganization Act and the 1975 Collateral Functions Training Agreement addressed the general concept of the U.S. Air Force training for and performing collateral functions in support of naval sea control operations.[8] However, with the demise of the B-52D, there will be a void in USN-USAF interaction which will likely not be filled as readily by a sophisticared supersonic successor less capable for sea control operations, and more committed ro strategic bombing missions, than its subsonic predecessor. While the carrier battle groups would continue to have an antisurface warfare mission, the long-range naval aviation strike force would allow them more opportunity to concentrate on local conventional and tactical nuclear warfare strike missions outside the coverage of the LRNA force.

With the significant savings realized by using Marine air wings on additional carriers rather than funding more Navy air wings, it will be possible, at least in part, to fund the design, development, and procuremenr of long-range aircraft. For the same cost, this is likely to result in procuring more offensive power. For example, considering personnel alone, it would seem that a long-range force designed primarily for offensive missions could be manned with significantly fewer people than a surface force with equivalent offensive capability, a significant consideration when one is uncertain if future enlistment and retention objectives are realistic. By the mid-1990s the number of eighteen-year-olds will decline by 26 percent from 1979's record high. The implications of smaller manning requirements are apparent in terms of money and manpower. The considerations are even more important if the long-range naval air force were substantially manned by reservists.

Economically and operationally, a case can also be made for deactivating the reserve-manned carrier air wings in favor of using the money and personnel for a partially reserve-manned long-range naval aviation strike force. The latter would likely be a more reliable force since it would respond more quickly and be logistically maintained more easily than the reserve carrier air wings. We possess reserve carrier air wings on the assumption that there will be flight decks available immediately. But those decks may not be there when the reservists are ready for them. Even now, the reserve P-3 squadrons are about 24 percent less costly to operate than the reserve carrier squadrons,[9] a factor that would likely be similarly applicable to a reserve-manned long-range naval aviation strike force. Such a force could also be maintained readily by civilian technicians and mechanics during a period when skilled Navy personnel were scarce. Another consideration aiding readiness is the fact that naval air reservists work in civilian occupations more closely associated with their active-duty assignments than surface reservists—whether performing their civilian or their military duties, many are pilots, technicians, and mechanics, whereas few surface reservists perform their service skills in civilian jobs.

In order to build weapon systems with a powerful offensive capability without drastically increasing their size and manning, both of which add to the cost, we must build those that require the least possible in the way of defense. The long-range aircrafr defensive mechanisms would be less expensive than those of surface ships since greater survivability would be inherenr in rheir environment of operations. Such aircraft, operating over water distant from Soviet antiair weapons and fighters, would be safe compared to ships which—in the same waters—would be vulnerable to antiship missiles and torpedoes. Furthermore, the aircraft would not be as susceptible to chemical or biological warfare as surface forces. In modern terms, the long-range naval aircraft may be the best way to gain maximum offensive power without having to invest in defensive systems, which may be both expensive and unreliable. More importantly, a force of such aircraft would not require construction of AAW and ASW escorts. The Air Force's AWACS aircraft could provide the AEW they would need.

A force of long-range naval aircraft would provide the least vulnerable, most expeditious, and most credible means we could have of coming ro th e aid of our Nordic allies bordering the Norwegian Sea, not only through the use of weapons such as Tomahawk, bur also rhrough that of rhe naval mine. Presently the Navy cannot lay mines on a large scale in seas, harbors, or critical chokepoints. A force such as we have been discussing and able to conduct offensive minelaying offers an opportunity for the Navy to take advantage of this highly cost-effecrive approach to warfare. As we perceive rhe possibility that the Soviet Navy is shifting from sea denial to sea control operations, we must be prepared ro reverse our roles in this area and counter their numerical superiority through the development of a versatile, mine-capable, sea-denial, long-range naval aviation strike force.

While recognizing that the time on station of aircraft would not match that of ships, their in-transit reaction time to potential crisis spots would be significantly faster, which would partially compensate for their lesser endurance. New propeller technology is also promising and may result in fuel savings from 25 to 40 percent above present turboprop aircraft operating at subsonic speeds of 0.7 to 0.8 Mach.[10] Long-endurance aircraft designed for up to five days airborne are now on the drawing board.[11]

The fact is that the U.S. Navy will be needing a new maritime patrol aircraft in the late 1980s or early 1990s to replace the P-3 series aircraft. The VPX could come in several subsonic versions of a standard airframe suitable not only for ASW but also for long-range attack missions, elecrronic warfare, refueling, logistics, and strategic communications. Large aircraft are more easily standardized in design for multimission concepts than are small aircraft. Not only would a subsonic aircraft be satisfactory operationally, but it would not require the scarce and costly straregic marerials needed to build sophisticated supersonic aircraft.

At any time the industrial base can be geard up more quicky to produce aircrafr than to produce ships. This would be particularly true if the aircraft were a variant of a new commercial rransport planned for production over a period of several years. Using a variant of a commercial aircraft would also be less expensive than specially designing an airplane for the Navy, since the engine and airframe tooling expenses would have been borne by the company which developed the aircraft. Such an approach would also be a significant step toward keeping our commercial aircrafr-building companies viable during a period when they may be dependent upon defense work. Other alternatives mighr be a Navy modification of the Wide Bodied Cruise Missile

Carrier or the long-endurance Big Bird aircraft, both of which are being considered as airborne launching platforms for missiles.

In short, the long-range naval air force might help us redesign our Navy so we can both afford it and man it.

Establishing a force of long-range aircraft at the expense of carrier aviation and surface ships will certainly make it harder for the Navy to attain balanced force levels. However, such a goal may be impossible anyway when considering the many multifaceted tasks our Navy performs. Even if a balance were eventually realized, the scales would still be small in comparison with those by which the Soviet Navy measures their symmetry. Therefore, we should consider developing intentional force asymmetries in areas orher than our sea-based air supremacy. A LRNA strike force, with a significant minelaying capability, may more effectively direct our efforts against the geographic and tactical limitarions of the Soviet Navy than surface combarants which will be needed for escort missions.

In summary, we can have a deployment plan which results in greater readiness and flexibility on the part of our carrier and amphibious forces, ar less operaring, maintenance, and personnel cosrs than we presently pay. Certainly the plan implies a version of the swing strategy—one that deploys our naval aviation and amphibious assets from eirher or both coasts to wherever they best suit our interests. While there are political sensitivities to such a strategy on rhe part of certain allies, it may be time to confront those apprehensions directly. In any event, even though they are not always acknowledged because of internal political reasons, our interests and those of our allies coincide more often than not.

In the long run, a responsive carrier and amphibious force strategy may be more palatable for our allies to accept, primarily because it can be made more credible than one in which continuous regional presence sometimes results in political irritations.[12] Lastly, formation of a long-range naval air force will meet the sea control and sea denial missions in an effective and economical manner. The result of implementing these concepts might be the U.S. Navy and Marine Corps able to emerge from the initial devastation of hostilities with a force still capable of protecting all essenrial U.S. interests worldwide.[13]

BIOGRAPHIC SUMMARY

Captain Sullivan is a naval flight officer currently on the staff of the Naval War College.

NOTES

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4. Edwin M. Simmons, "Marine Corps Operations in Vietoam, 1969-1972," U.S. Naval Institute *Proceedings*, May 1973, p. 222. AH-1J attack helicopter operations aboard U.S.S. *Denver* (LPD-9) and U.S.S. *Cleveland* (LPD-7) in 1971-1972, in which the author was involved.

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6. Henry S. Bradsher, "Navy Sees Value in Land Based Jets," *Washington Star*, 15 June 1981, p. 3. See also, M.S. Holcomb, "VADM Holcomb Discusses Sea Warfare in the Future, Department of the Navy, *Navy Policy Briefs*, August 1980, p. 3 (inference to a central role for land-based aircraft in future naval warfare).

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10. "Pinwheel Prop—New Design for Fuel-Efficient Flying," *Popular Science*, August 1981, p. 81.

11. "Industry Observer," *Aviation Week & Space Technology*, 28 September 1981, p. 15.

12. Office of Assistant SECDEF (PA), "News Release 4 Aug. 1981," Address by the Honorable John Lehman, SECNAV, p. 4.

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The Heart of the Matter:

Remarks on Operations and Logistics

"I have always been deeply interested in the administrative side of love, which I find more absorbing than its purely erotic aspects. What Lady Chatterley and her gamekeeper did in the woods is, to me, of only passing interest, compared with how they got there, what arrangements were made for shelter in the case of inclement weather, and for refreshments, how they accounted for their absence, whether either party could recover incidental expenses, and if so how. This attitude is, after all, not so unreasonable. Most great generals have admitted that planning campaigns and winning victories in the field is relatively easy compared with arranging transport and supplies. An army, Napoleon said, in one of his most celebrated remarks, marches on its stomach. So do lovers. If the administrative arrangements are faulty, the campaign which follows cannot but be laborious, and even victory brings little satisfaction."

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